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First Named Applicant: Bernhardt Application No.: 10/001,513 Filed: 10/31/2001 Title: Safety Systems for Grinding Machines Attorney Docket No.: KWPT.P-007 Customer No.: 021121	Group Art Unit: 3725 Examiner: ROSENBAUM, MARK Confirmation No: 3245

APPENDIX ON APPEAL

CLAIMS ON APPEAL

37. A grinding machine having a direction of material flow, with at least one blade defining a last blade in the direction of material flow, and a safety device downstream of the last blade in the direction of material flow, the safety device comprising a plate perforated by holes, each hole having a hole diameter less than or equal to 6 millimeters.

38. The grinding machine of claim 37 further comprising means responsive to a presence of the safety device for preventing the machine from being put into operation when the safety device is not in place.

39. The grinding machine of claim 37 wherein the plate has a thickness of at least 5 millimeters.

40. The grinding machine of claim 37 wherein the plate has a thickness, further comprising means responsive to the thickness for preventing the machine from being put into operation when the thickness of the plate drops below a minimum thickness as a result of wear.

41. The grinding machine of claim 37 wherein is defined a cumulative operating time of the grinding machine with a particular plate, further characterized in that the machine cannot be put into operation after a predetermined operating time has elapsed with respect to the particular plate.

42. The grinding machine of claim 37 further comprising a lock nut downstream of the blade in the direction of material flow, wherein the safety device is integrated into the lock nut.

43. A plate perforated by holes, each hole having a hole diameter less than or equal to 6 millimeters, the plate further comprising a means on which data can be stored and retrieved that permit unequivocal identification of the plate.

44. The plate of claim 43 wherein data are stored on the means, and wherein the data contain information concerning the size of the holes.

45. The plate of claim 43 wherein the data contain information concerning the thickness of the plate.

46. The plate of claim 43 wherein operating time data and operating stress data of the plate can be stored on the means and retrieved.

47. The plate of claim 46 in combination with means interpreting the stored operating time data and the stored operating stress data to infer wear of the plate.

48. The plate of claim 43 wherein the means is provided in a sealed cavity.

49. The plate of claim 43 wherein the means is linked to a transmitter and receiver system in bi-directional fashion.

50. The plate of claim 43 wherein the means is a sensor chip.

51. A plurality of plates each perforated by holes, each hole having a hole diameter less than or equal to 6 millimeters, each plate further comprising a respective means on which identification data can be stored and retrieved that permit identification of the plate, each plate having unique identification data with respect to the others of the plates.

52. The plates of claim 51 wherein data are stored on the respective means for each plate contain information concerning the size of the holes for the plate.

53. The plates of claim 51 wherein data are stored on the respective means for each plate contain information concerning the thickness of the plate.

54. The plates of claim 51 wherein operating time data and operating stress data of each plate are stored on the respective means and retrieved.

55. The plates of claim 54, each plate in combination with respective means interpreting the stored operating time data and the stored operating stress data to infer wear of the plate.

56. The plates of claim 51 wherein each means is provided in a sealed cavity.

57. The plates of claim 51 wherein each means is linked to a transmitter and receiver system in bi-directional fashion.

58. The plates of claim 51 wherein each means is a sensor chip.

59. A grinding machine having a downstream direction of material flow along a path, the machine comprising a plate disposed within the path, the plate perforated by holes, each hole having a hole diameter less than or equal to 6 millimeters, the plate further comprising a means on which data can be stored and retrieved that permit unequivocal identification of the plate.

60. The grinding machine of claim 59 comprising at least a last blade in the direction of material flow, wherein the plate is located downstream of the last blade in the direction of material flow.

61. A method for use with a grinding machine having a downstream direction of material flow along a path and having at least a last blade along the direction of material flow, the machine comprising a plate disposed within the path and located downstream of the last blade, the plate perforated with holes, the plate comprising means storing respective identification data, the method comprising the steps of:

retrieving the respective identification data; and

making a check of whether the plate satisfies predetermined safety standards.

62. The method of claim 61 further comprising the step of putting the machine in operation if the result of the check is positive.

63. The method of claim 61 further comprising the step of not putting the machine in operation if the result of the check is negative.

64. The method of claim 61 wherein the retrieving step further comprises retrieving information indicative of the cumulative operating time and cumulative mechanical stress with respect to the plate, and wherein the checking step further comprises using the operating time and stress information are used to estimate wear thereof, further comprising the step of not putting the machine in operation in the event of excessive wear.